

- The proposed station will not significantly affect the environment as defined in Part I, Subpart J of the Commission's rules.¹⁵⁷
- The antenna structure either has a FCC Registration Number or is determined to not need one.
- The proposed station affords protection to radio "quiet" zones and monitoring stations."

The Commission also proposed to allow temporary conditional authority for low power auxiliary stations authorized under Part 74, Subpart H.¹⁵⁹ To effectuate these changes, the Commission proposed to delete Section 74.431(g) and to adopt new Section 74.25 to allow temporary conditional authorizations for all broadcast auxiliary services.¹⁶⁰

80. Commenting parties generally support the proposals set forth in the *Notice*.¹⁶¹ MSTV/NAB support allowing temporary conditional authority for **BAS** stations, provided that the BAS facility has been appropriately coordinated.¹⁶² Comsearch states that temporary conditional authority has been extremely useful to Part 101 users in allowing rapid deployment and should be available to BAS and CARS users." SBE concurs with the proposal, provided that there is evidence of local frequency coordination and the conditions proposed in the *Notice* are met.'" However, Comsearch opposes temporary conditional authority based on local frequency coordination, which it contends is a unilateral frequency coordination process. Comsearch argues that the licensees and applicants who are affected by a temporary conditional authority proposal must be given an opportunity to review and, if necessary, oppose that proposal prior to operation of the proposed facilities.¹⁶⁵

81. *Discussion.* We find that providing BAS applicants with the ability to operate under temporary conditional authority is appropriate. As suggested by the commenting parties, such an approach will permit the provision of service in a timelier manner without causing harmful interference to existing licensees, so long as frequency coordination is successfully performed. Accordingly, we are

¹⁵⁷ 47 C.F.R. § Part I, Subpart I

¹⁵⁸ *Notice* at ¶ 47

¹⁵⁹ *Id.* at ¶ 48. Low power auxiliary stations are intended to transmit over distances of approximately 100 meters for uses such as wireless microphones, cue and control communications, and synchronization of TV camera signals. These stations are typically used in conjunction with a BAS station.

¹⁶⁰ *Id.* at ¶¶ 48-49

¹⁶¹ See APTS/PBS Comments at 6; MSTV/NAB Comments at 8; Comsearch Comments at 5; TIA Reply Comments at 3.

¹⁶² MSTV/NAB Comments at 9

¹⁶³ Comsearch Comments at 4

¹⁶⁴ SBE points out that the word "nor" was omitted from proposed Section 74.25(c)(ii), which reads, "The station site does lie within an area requiring international coordination." See SBE Comments at 12.

¹⁶⁵ Comsearch Reply Comments at 3.

deleting Section 74.411(g) and adopting a new Section 74.25 to allow temporary conditional authorizations for all broadcast auxiliary services.¹⁶⁶

2. Short-Term Operation

82. Section 74.24 provides broadcast licensees regulated under Part 73 of our rules (*i.e.*, AM, FM, and TV broadcast stations, including Class A stations) with the authority to operate a broadcast auxiliary station on a short-term secondary basis, for up to 720 hours per year, without prior authorization from the Commission, subject to providing notification to the local frequency coordinator, and to co-channel and adjacent channel CARS licensees.” This rule section provides broadcasters with flexibility to respond to short term situations that occur outside of a station’s normal operating area without coming to the Commission with requests for **STA**. However, the same flexibility **is** not afforded to broadcast network entities, cable network entities, or LPTV stations, even though these entities are eligible to hold BAS licenses. Thus, the current rules allow one class of BAS licensees - broadcasters - to operate under the short-term operation rule, but exclude all other BAS licensees even though each of these entities may operate their own news services and originate programming. Because we believe that broadcast and cable network entities and LPTV stations would benefit from the short-term operation rule and such use would provide equity under our rules for all entities eligible for a BAS license, the Commission proposed in the *Notice* to expand the eligibility of this rule.¹⁶⁸ The Commission also proposed to clarify that entities may not invoke the notification exception for scheduled events.¹⁶⁹ The Commission further proposed to codify the procedures for designating a coordinator as the single point of contact for advance coordination of auxiliary broadcast frequency usage of major national and international level scheduled news events. In the *Notice* the Commission pointed out that it has accomplished this in the past by issuing a Public Notice, but that such procedures should be contained in the rules.¹⁷⁰ The Commission also sought comment on whether the current Rule which limits short-term operation for a licensee to 720 hours per year per frequency should be modified, and whether stations should be required to keep a log of their short term use in their station records.”

83. Commenting parties generally support the proposals set forth in the *Notice*.” APTS/PBS state that they support the proposals to extend short-term operation to broadcast network entities, cable entities, and low power television stations; to relax the notification requirement only in cases of unanticipated need for immediate short-term mobile operation, specifically excluding scheduled events; and to establish a procedure for designating a frequency coordinator for short-term BAS operations

¹⁶⁶ We also correct the error in Section 74.25(c)(ii) pointed out by SBE and modify that provision to read, “The station site does not lie within an area requiring international coordination.”

¹⁶⁷ 47 C.F.R. § 74.24. There is an exception to the local coordinator notification requirement when “... an unanticipated need for immediate short-term mobile station operation would render compliance with the provisions of this paragraph impractical.” See 47 C.F.R. § 74.24(g).

¹⁶⁸ *Notice* at ¶ 51

¹⁶⁹ *Id.* at ¶ 52

¹⁷⁰ *Id.* at ¶ 53.

¹⁷¹ *Id.* at ¶ 54.

¹⁷² See APTS/PBS Comments at 7; MSTVMAB Comments at 9; Globalstar Comments at 7; SBE Comments at 12.

covering major national and international scheduled news events.¹⁷³ MSTV/NAB state that they generally support the proposal to extend short-term operation to broadcast networks, cable, networks, and LPTV stations, but contend that it is vitally important to require that all such operations be prior coordinated. MSTVMAB also contend that there is no clear definition of a scheduled event, for which the licensee would be excluded from invoking the notification exception in proposed Section 74.24(g). MSTVMAB further support the proposed procedures to designate a frequency coordinator for short-term operations at special events, if such designation is granted following a formal request. Finally, MSTVMAB oppose changing the current 720 hour limit on short-term operation or requiring stations to log and track their short-term use.¹⁷⁴

84. SBE also concurs with the proposal to extend short-term operation to broadcast network entities, cable network entities. However, SBE recommends that because these entities do not have call signs, they identify themselves using the network or cable base entity name and city of operation.” SBE would disallow short-term operation for links operated intermittently on permanently installed antennas, as it believes such operation should be frequency coordinated and licensed. SBE also recommends that the existing requirement to always provide advance notice to co-channel and adjacent channel CARS licensees is unnecessary and redundant, given the current frequency coordination tools and the experience and knowledge of local coordinators.” In addition, SBE asserts that the 720 hour limit has proven to be unenforceable and should be changed to a 30 calendar day period per year per market. It contends that this would be simpler to follow and enforce because broadcasters would not have to count hours or skipped days and a FCC field engineer would only need to determine the date of first operation to ascertain compliance. As an exception, SBE would allow itinerant operators to halt and restart the 30-day clock each time it leaves and returns to a market.

85. Globalstar states that it does not object to extending short term operation to broadcast network entities, cable network entities and LPTV stations, but asserts that because such use has been increasing, it is essential that coordination be conducted prior to commencing operation, particularly for mobile operations in spectrum shared with satellite services. Globalstar urges that in addition to notification, coordination should be accomplished with the frequency coordinating committee or co-channel licensee prior to commencement of operations to avert interference to an NGSO MSS feeder downlink. For the same reasons, Globalstar urges that the proposed exception to notification in cases of unanticipated need not be allowed for spectrum shared with NGSO MSS spectrum in the 2 GHz and 7 GHz bands. Finally, Globalstar recommends that the Commission list in its rules a telephone number and website address for contacting local coordinating committees and special event coordinators, similar to the outdated reference in current Section 74.24(g) that refers applicants to the Commission’s Auxiliary Services Branch for information on active frequency coordination committees.¹⁷⁷

86. In reply comments, SBE notes that all short term authority operation is secondary.

¹⁷³ APTS/PBS Comments at 7.

¹⁷⁴ MSTVMAB Comments at 9-10

¹⁷⁵ SBE Comments at 12.

¹⁷⁶ SBE Comments at 13

¹⁷⁷ Globalstar Comments at 7-9. The Auxiliary Services Branch no longer exists and the Commission no longer maintains information on active frequency coordination committees. Thus, reference to it has been omitted from the proposed revision of Section 74.24(g).

Therefore it is not necessary to prohibit uncoordinated short-term use under the notification exception in the 2 GHz and 7 GHz bands, as requested by Globalstar.¹⁷⁸

87. *Discussion.* To promote consistent treatment of licensees with similar operations, we adopt our proposal to extend the short-term operation rules to broadcast network entities, cable network entities, and LPTV stations. This action, which is not opposed by any commenter, will simplify the process for these entities when it is necessary to provide coverage of events outside of its normal coverage area. In addition, our proposal to codify rules and procedures for designating a coordinator for major special events was supported by commenters and is adopted as proposed with one clarification; we will specify in Section 74.24(g)(2)(i) that the initial request for such designation be made in writing. Such designations will be made by public notice which will include all necessary contact information. Thus Globalstar's request that contact information be placed in the rules is denied."

88. Extending this rule to cover additional entities raises questions regarding compliance with the various station identification rules. Therefore, because broadcast network and cable network entities do not have individual station call signs for identification purpose, we will require them to use their network or cable entity name along with their base of operations city for compliance with the station identification rules, as suggested by SBE. Using such a scheme will make it easy to identify the proper point of contact should a problem arise.

89. With respect to SBE's concern regarding intermittent operation on permanently installed antennas, we note that the rule does not prohibit such operation, and thus it is permitted, under Section 74.24, without formal coordination and licensing.

90. With respect to adding a requirement that full frequency coordination be accomplished prior to operation under the short-term operation rule, we disagree with Globalstar that such a requirement is necessary. First, we note that all operation under this rule is secondary. Second, we believe that the current requirement to notify the local coordinating committee or co-channel licensees, and co-channel and adjacent channel **CARS** licensees is sufficient. These conditions assure that operations under the short-term operation rule have a minimal chance of causing harmful interference while providing broadcasters the ability to cover a newsworthy event without delay.

91. As detailed above, SBE requests that the requirement that co-channel and adjacent channel **CARS** be notified when a broadcaster operates under the short-term operation rule be deleted. We are not inclined to do so. We disagree with SBE's position that this requirement is unnecessary and redundant. **CARS** stations generally transmit large blocks of contiguous video channels with no filtering. The notification requirement is necessary to ensure that **CARS** licensees, particularly those operating on adjacent channels without receiver filtering, are afforded an opportunity to have prior knowledge of the RF operating environment. This is especially important in areas where local coordinators are not available or provide limited assistance.

92. Finally, we will maintain the current limitation of 720 hours per year per frequency for short-term operation. We agree with the **MSTVMAB** that the existing limit has worked well and that there does not appear to be a demonstrable need to make changes at this time. We do not believe that

¹⁷⁸ SBE Reply Comments at 5

¹⁷⁹ We note that the current information on local frequency coordinators is maintained by SBE on their website at <http://www.sbe.org>.

changing this limit to a 30 calendar day limit, as suggested by SBE, would significantly increase the enforceability of the rule, absent the imposition of a logging requirement. This is especially true for the stop/start provisions which SBE also proposes to permit, as an exception to the 30 consecutive day limit, for network entities with no regular presence in the market.

3. Use of UHF-TV Channels for TV STLs and TV Relay Stations

93. Under Section 74.602(h) of the Commission's rules, TV STLs and TV relay stations may be authorized, on a secondary basis, to operate fixed point-to-point service on spectrum allocated for UHF-TV stations.'" In addition to being secondary to full power UHF-TV and Class A TV stations, these stations are also secondary to LPTV stations and translator stations, and to land mobile stations authorized under Parts 22 and 90 in areas where land mobile sharing is permitted.¹⁸¹ The rules, however, do not contain any guidelines regarding acceptable power limits or antenna specifications for these stations.'" Instead, the Commission has developed policies to determine how to authorize these stations. Specifically, TV STL and TV relay station applicants that request output power greater than 20 watts or a transmitting antenna with a 3 dB beamwidth greater than 25 degrees are asked to submit an engineering analysis to demonstrate why the higher output power or wider beamwidth is necessary.'" Because the Commission is increasingly relying on automated processing, as evidenced by the ULS, it stated in the *Notice* that codifying operational parameters for these stations would be beneficial so that prospective applicants have as much information as possible to assist them. The Commission further stated that this change would shorten the application process by minimizing the number of applications that need to be returned due to failure to submit an engineering analysis if the stated specifications are exceeded.'"

94. To implement this policy in the rules, the Commission proposed to modify Section 74.602(h) to permit applicants for TV STL and TV relay stations up to 35 dBW EIRP, a 3 dB beamwidth of 25 degrees or less, and use of vertical polarization¹⁸⁵ without submitting an engineering analysis.¹⁸⁶ In

¹⁸⁰ 47 C.F.R. § 74.602(h). The UHF-TV spectrum may be used only if a licensee cannot find spectrum available in any other frequency band allocated for these stations.

¹⁸¹ 47 C.F.R. Parts 22 and 90 provide for the use of land mobile stations in the 470-512 MHz band (TV channels 14-21). *See, e.g.*, 47 C.F.R. §§ 22.621 and 90.303. Additionally, we note that the Commission adopted an *Order* in 1995 granting a conditional waiver for public safety land mobile use of Channel 16 in New York City. *See* In the Matter of Waiver of Parts 2 and 90 of the Commission's Rules to Permit New York Metropolitan Area Public Safety Agencies to Use Frequencies at 482-488 MHz on a Conditional Basis, *Order*, 10 FCC Rcd 4466 (1995). Under terms adopted in the *Report and Order* in MM Docket No. 00-10, the New York Police, operating under authority of the cited waiver, and LPTV station WEBR-LP will continue their current practice of cooperating to ensure that neither party interferes with the other's transmission on Channel 16. *See* In The Matter Of Establishment Of A Class A Television Service, MM Docket No. 00-10, *Report and Order*, 15 FCC Rcd 6355 (2000) at ¶ 84.

¹⁸² *See* 47 C.F.R. § 74.636 (power limits), 47 C.F.R. § 74.641 (antenna requirements),

¹⁸³ This policy was articulated for applicants in RM-7586. *See* TV Auxiliary Use of Vacant UHF-TV Channels, RM-7586, *Memorandum Opinion and Order*, 10 FCC Rcd 4896 (1995) (*UHF-TV Order*) at ¶¶ 9-11

¹⁸⁴ *Notice* at ¶ 55

¹⁸⁵ Vertical polarization, rather than the more commonly transmitted horizontal polarization is required as an added safeguard to prevent reception of these signals by the public.

¹⁸⁶ *Id.* at ¶ 57

addition, because the Commission also regularly licenses TV translator relay stations on UHF-TV channels, it proposed that they also be subject to these rules." Finally, the Commission proposed to limit future assignments on UHF-TV stations to channels 14-51 and to grandfather existing operations on channels 52-69. This proposal was made based on the Commission's recent reallocation of channels 52-59 (698-746 MHz)¹⁸⁸ and channels 60-69 (746-806 MHz) from broadcasting to fixed, mobile, and broadcasting with most licenses to be assigned by competitive bidding.¹⁸⁹

95. Commenting parties generally support the proposals set forth in the *Notice*.¹⁹⁰ In supporting the proposal MSTV/NAB additionally ask the Commission to require that such links be encoded to prevent reception by consumers. They contend that the vertical polarization restriction is insufficient in this regard.¹⁹¹ SBE, while supportive of placing the current policy requirements in the rules, objects to allowing these links to be established without an engineering analysis. It points out that the current rules which require point-to-point links to meet the same technical requirements of new TV translator or LPTV stations, protects existing broadcast stations, especially if the new station is intended to be located at a high elevation. In addition, SBE recommends providing an incentive to use vertical polarization, but not requiring its use. SBE would accomplish this by applying a 10 dB polarization factor to stations using vertical polarization during their analysis. SBE is supportive of restricting future links to channels 14-51 and our proposal to grandfather existing stations operating on channels 52-69.¹⁹²

96. The National Translator Association (NTA) opposes our proposal to cease licensing translator relay stations on UHF-TV channels 52-69. It asks that authorizations for new translator relay stations be permitted on these channels on a secondary, non-interference basis until such time as the Commission's Media Bureau stops accepting applications for new translator stations on these channels. It states that translator relay stations are an economical method of transporting a station's signals to TV translator station and that most translator relays are in relatively remote areas where new spectrum users will be slow to use the spectrum. It also notes that during the transition to DTV, stations will be using both analog and digital channels, making it difficult to find available channels for new translator relay

¹⁸⁷ *Id.* at ¶ 58.

¹⁸⁸ See In the Matter of Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), *Keppor and Order*, GN Docket No. 01-74, 17 FCC Rcd 1022 (2002) (*Channel 52-59 Reallocation Order*), at ¶¶ 2, 13.

¹⁸⁹ See generally In the Matter of Reallocation of Television Channels 60-69, The 746-806 MHz Band, ET Docket No. 97-157, *Keppor and Order*, 12 FCC Rcd. 22953 (1998). In that proceeding the 764-776 MHz and 794-806 MHz bands were designated for use by public safety. The 746-747 MHz, 762-764 MHz, 776-777 MHz, and 792-794 MHz bands have already been auctioned and assigned to guard band managers. That auction was completed on February 21, 2001. See 700 MHz Guard Bands Auction Closes, DA 01-478, *Public Notice*, Feb. 22, 2001. The auction for the 698-746 MHz band began June 19, 2002 and the auction for the 747-762 MHz and 777-792 MHz bands is scheduled to begin January 14, 2003. See In the matter of Auction of Licenses in the 747-762 and 777-792 MHz Bands (Auction No. 31); Auction of Licenses in the 698-746 MHz Band (Auction No. 44); Cellular Telecommunications & Internet Association, Paxson Communications Corporation and the Spectrum Clearing Alliance Applications for Review of Wireless Telecommunications Bureau Letter, April 10, 2002, DA 02-857, WT Docket No. 99-168, GN Docket No. 01-74, *Order*, rel. May 24, 2002.

¹⁹⁰ See APTS/PBS Comments at 7-8; MSTV/NAB Comments at 11

¹⁹¹ MSTMAB Comments at 11

¹⁹² SBE Comments at 14-15

operations.¹⁹³

97. *Discussion.* Based on the comments, we adopt, with some modification, our proposals with respect to the future use of UHF-TV channels by TV STLs, TV relay stations, and TV translator relay stations. We will permit these stations to obtain authorizations without submitting an engineering analysis so long as they meet the specified technical parameters – maximum EIRP of 35 dBW, maximum transmitting antenna beamwidth of 25 degrees, and use of vertical polarization. In addition, we will limit future licensing, beginning as of the effective date of the rules of this *Report and Order*, of TV STLs and TV relay stations to channels 14-51; current stations on channels 52-69 will be grandfathered under the terms of their current authorization until the end of the DTV transition or until new primary licensees require the removal of such operations. Finally, for the reasons given by NTA, we will permit future licensing of TV translator relay stations on all UHF-TV channels 52-69 through the end of the DTV transition as long as harmful interference is not caused to new primary services.

98. We disagree with MSTV/NAB and SBE that additional measures must be taken to protect UHF-TV broadcast operations from TV STLs, TV relay stations, and TV translator relay stations. The Commission articulated in the *UHF-TV Order* that, given the power and antenna restrictions and absent any evidence of TV BAS stations being used to provide direct service to the public, a coding requirement would present an unwarranted additional cost burden on these stations.¹⁹⁴ We believe this still to be the case and decline to add this additional requirement as a condition of licensing. In the *UHF-TV Order*, the Commission eliminated certain engineering showings and streamlined the licensing process. In doing so, we are unaware of any stations that have encountered interference due to these policies. Therefore, we decline to adopt any additional restrictions or review procedures which would unnecessarily burden licensees or the licensing process. We will however make a slight wording change to Section 74.602(h)(1) to clarify that if any of the specified parameters are exceeded, an engineering analysis must accompany the application.¹⁹⁵ We also point out that stations licensed under 74.602(h) are secondary and regardless of their operating parameters, must protect all primary stations using the UHF-TV spectrum, including land mobile stations.¹⁹⁶

¹⁹³ NTA *Ex Parte* presentation of March 21, 2002, ET Docket No. 01-75, filed May 10, 2002, at 1-2. NTA also asks that we allow the transmission of multiple contiguous standard 8-Level Vestigial Side-Band (8VSB) digital modulation signals from multiple primary stations, as defined in Section 74.701(b), on one set of microwave equipment operating on a channel for which a TV translator relay station is already authorized. We clarify here that Section 74.631(d) already allows such a station to multiplex signals to provide additional communication channels in the manner requested by the NTA. 47 C.F.R. §§ 74.701(b), 74.631(d). In addition, we note that because NTA states that the proposed operation would adhere to the current emission mask, allowing multiple signals within a channel will not increase the interference potential of transmissions within the channel.

¹⁹⁴ See *UHF-TV Order* at ¶¶ 12-13.

¹⁹⁵ We are modifying the language of proposed Section 74.602(h)(1) to, "Applications for authorization in accordance with this paragraph must comply with the following technical limits or be accompanied by an engineering analysis demonstrating why these limits must be exceeded."

¹⁹⁶ Stations licensed under 47 C.F.R. § 74.602(h) are subject to provisions of Part 74, Subpart G, which contains protection criteria for many types of stations. See, for example, Sections 74.705, 74.707, and 74.709 for interference protection criteria for TV broadcast stations; low power TV and TV translator stations; and land mobile stations, respectively. 47 C.F.R. §§ 74.705, 74.707, and 74.709.

99. Commenters, recognizing that the frequency bands encompassing UHF-TV channels 52-69 have been reallocated, generally support our proposal to cease licensing BAS stations on this spectrum. Accordingly, for applications filed on or after the effective date of these rules, we will no longer accept applications for TV STLs or TV relay stations for operations on TV channels 52-69. Existing stations will be grandfathered on a continued secondary basis under the terms of their current authorizations until the end of the DTV transition or until the band is needed for new primary status licensed services.¹⁹⁷ This action will minimize encumbrance of the spectrum and ease the introduction of new services. We take a slightly different approach, however, to future licensing of TV translator relay stations. We will allow new authorizations for these stations to operate on UHF-TV channels 52-69 until the end of the DTV transition as long as there are no interference conflicts with new licensed services. We find that this action should not affect new uses of this spectrum as TV translator relay stations operate on a secondary basis to new primary services on UHF-TV channels 52-69 and TV translator relay stations are typically in remote areas. In addition, this is consistent with the Commission's decision in the *Channel 52-59 Reallocation Order*, which allows the continued filing and operation of new low power TV and TV translator stations, on a secondary basis, on Channels 52-69 through the end of the DTV transition.¹⁹⁸ We observe that TV translator relay stations are typically used to carry TV signals to translator stations¹⁹⁹ to serve communities that are far from TV broadcast stations. Such transmission is often more economically accommodated at UHF-TV frequencies than in the higher microwave frequency bands available to TV BAS. Given the value of TV translator relay stations to rural areas that may not see new primary services for years to come, and the fact that new TV translators may be authorized only on a secondary basis on UHF-TV Channels 52-69 through the end of the DTV transition, we find that the continued authorization and operation of TV translator relay stations is desirable and will not impact new primary services. Consistent with the *Channel 52-59 Reallocation Order*, we also will permit translator relay stations in operation on channels 52-59 at the end of the DTV transition to continue operating on a secondary basis to new services after the end of the transition.²⁰⁰

100. Finally, we remind all TV BAS licensees and prospective applicants for operation on UHF-TV channels 52-69 (698-806 MHz) that operations by new primary services in that band will be permitted anywhere within the licensed geographic areas as soon as they are licensed, and need not wait until the end of DTV transition, on December 31, 2006, or later,²⁰¹ provided they do not interfere with full-power TV. For example, a new primary service licensee may be able to deploy in areas without TV service or make arrangement for spectrum access prior to the completion of DTV transition. TV BAS operations, because of their secondary status both during and after DTV transition, are not permitted to cause harmful interference to stations of primary services - including new licensees in the band as a result

¹⁹⁷ 47 U.S.C. § 309(j)(14)(A)-(B). This statute requires analog TV broadcasters to cease operation in the recovered spectrum by the end of 2006 unless the Commission extends the end of the transition, which it is required to do at the request of individual broadcast licensees on a market-by-market basis, if (1) one or more of the four largest network stations or affiliates is not broadcasting in digital format; (2) digital-to-analog converter technology is not generally available; or, (3) 15 percent or more of television households are not receiving a digital signal. See also *Channel 52-59 Reallocation Order* at ¶ 3.

¹⁹⁸ *Channel 52-59 Reallocation Order* at ¶¶ 46-49. See also footnote NG 159 to the Table of Frequency Allocations in Section 2.106, 47 C.F.R. § 2.106.

¹⁹⁹ See 47 C.F.R. §§ 74.631(g) and 74.632(e).

²⁰⁰ *Channel 52-59 Reallocation Order* at ¶ 48.

²⁰¹ 47 U.S.C. § 309(j)(14)(A)-(B).

of the upcoming auctions. This means that if TV **BAS** operations cause harmful interference to these primary services: they must cease operation immediately, regardless of whether this occurs before or after the end of DTV transition. Secondary TV **BAS** operations are also required to accept any interference caused by these primary services.

4. TV **BAS** Sound Channels

101. Section 74.603(b) of the Commission's rules provides authority for TV **BAS** stations to use an aural broadcast STL or relay station licensed under the aural **BAS** rules to transmit the aural portion of a television broadcast program. This use is on a secondary, non-interference basis to programming of aural broadcast stations.” In the *Notice*, the Commission stated that its understanding of current industry practice is for broadcasters to use multiplexing techniques, rather than separate sound channels, to transmit the aural portion and video portion of their programming over a single TV **BAS** channel. Therefore, the Commission proposed to eliminate Section 74.603(b). Additionally, the Commission proposed to eliminate the corresponding provision of Section 74.502(b) that provides TV **BAS** licensees’ authorization to use the aural **BAS** channels. The Commission also sought comment on whether it should delete Section 74.603(c), which provides grandfathering rights so that TV **BAS** stations could continue operating aural STL or relay stations that were in service prior to July 10, 1970.²⁰³

102. *Discussion.* SBE, the only commenter on this issue, confirms our understanding of current industry practice and concurs with our proposals.²⁰⁴ Accordingly, we adopt our proposals to eliminate Sections 74.603(b), 74.502(b), 74.603(c).

5. Remote Pickup Broadcast **Auxiliary** Frequency Assignment

103. In 1984, the Commission adopted a comprehensive revision of the rules for Remote Pickup station frequency assignments.²⁰⁵ That *Report and Order* split the Remote Pickup channels in the 150 MHz, 160 MHz and 450 MHz bands into 5 kilohertz channels that could be “stacked” to create channels of various sizes. Thus, licensees could continue operating their equipment under existing licenses and existing and new licensees seeking to update their systems could make use of newer narrowband technology. The *Report and Order*, however, stated that an effective date for these rules would be specified in a future Order. To date, the Commission has not taken such action.

104. The rules written in 1984 for the Remote Pickup Broadcast Service were intended to provide licensees more freedom to choose and implement new technologies in their effort to make the most efficient use of the spectrum. Because many technical and regulatory changes have occurred since 1984, the Commission proposed in the *Notice* to amend the rules adopted in 1984, as discussed below, to ensure that this objective will be achieved.²⁰⁶

²⁰² 47 C.F.R. § 74.603(b).

²⁰³ *Notice* at ¶¶ 60-61

²⁰⁴ SBE Comments at 15.

²⁰⁵ See Amendment of Frequency **Assignment** Procedures in the Broadcast Remote Pickup Service to Facilitate More Efficient Use of the **Available** Spectrum, MM Docket No. 84-280, *Report and Order*, 49 FR 45155 (Nov. 15, 1984). See also Section 74.402. 47 C.F.R. § 74.402.

²⁰⁶ *Notice* at ¶ 63

105. Since 1984, significant advances have been achieved in the development of narrowband radios, such as the maturation of digital modulation techniques, improved coding processes, and development of more stable oscillators. In 1995, based on advances such as these, the Commission adopted a narrowband channel plan for the 150–174 MHz and 450–512 MHz bands used by Part 90 Private Land Mobile Radio Service (PLMRS) licensees.²⁰⁷ In that decision, the Commission adopted a channel plan in which channels were spaced every 7.5 kilohertz in the 150 MHz band and every 6.25 kilohertz in the 450 MHz band. Under certain circumstances, these channels could be stacked to allow the use of 6.25, 12.5 or 25 kilohertz equipment.

106. The Commission stated in the *Notice* that it believed that this same band plan is suitable for Remote Pickup BAS operations. Moreover, because many of the 150 MHz and 160 MHz Remote Pickup channels are shared with the Part 90 Industrial/Business Pool, the Commission stated that both services might benefit from a common channel plan, with the benefits including more predictable adjacent channel performance, easier coordination procedures, and economies of scale for equipment. The Commission noted, however, that under the 1984 rules, these benefits would not be realized if Remote Pickup licensees modify their operating frequencies to correspond to channel centers based on 5 kilohertz spacing. A shift to 5 kilohertz spacing for BAS would create an operating environment in which Part 74 and Part 90 licensees are operating co-channel, offset by 2.5 kilohertz or offset by 5 kilohertz.²⁰⁸ In many cases there would be significant overlap of RF energy between adjacent channels which could degrade the performance of user's systems as other nearby users attempt to transmit on closely spaced adjacent channels. In addition to the increase in potential interference, these conflicting channel plans would complicate the frequency coordination process because coordinators would need to account for many closely spaced adjacent channels. Consequently, the Commission proposed to amend the frequency assignment rules for the 150 MHz and 160 MHz bands in Section 74.402 to be consistent with the channel plan in effect in Part 90 (i.e., 7.5 kilohertz channel spacing). Additionally, the Commission proposed to allow licensees to stack up to 4 channels to operate on channels as wide as 30 kilohertz. The Commission stated that implementing this channel plan could suit both Remote Pickup BAS operators and PLMRS providers, and would benefit users by allowing for common equipment to be used for both Part 74 and Part 90 licensees.²⁰⁹

107. In the *Notice*, the Commission also stated that the vast majority of licensees in the 150 MHz and 160 MHz bands can be accommodated by the proposed channel plan without having to change their equipment. The proposed channel plan includes all of the channels used by the majority of licensees under the pre-1984 plan. Compliance with the 1984 channel plan, on the other hand, because it is based on 5 kHz channel spacing would require licensees to modify their operating frequency, either by retuning or replacing their equipment. The Commission stated that a search of its licensing database

²⁰⁷ See Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency assignment Policies of the Private Land Mobile Radio Services, PR Docket No. 92-235, *Report and Order and Further Notice of Proposed Rule Making*, 10 FCC Rcd 10076 (1995) (*Refarming R&O*).

²⁰⁸ For example, under the rules adopted in 1984 for the Remote Pickup Broadcast Service, valid frequencies for use include 152.8625 and 152.8675 MHz. See 47 C.F.R. § 74.402. Valid Industrial/Business Pool frequencies under Part 90 include 151.8625 and 152.870 MHz. See 47 C.F.R. § 90.35. From these frequencies, it is clear that valid frequency separations include 0, 2.5, and 5 kilohertz (e.g., 152.8675 MHz – 152.8625 MHz = 5 kilohertz and 152.870 MHz – 152.8675 MHz = 2.5 kilohertz.)

²⁰⁹ *Notice* at ¶ 66

reveals that most licensees continue to operate on the Remote Pickup channels under the pre-1984 channel plan, and that there are only 7 Remote Pickup licensees in the 150 MHz band and 25 in the 160MHz band that have begun operating using the 1984 channel plan.²¹⁰

108. In the *Notice*, the Commission also proposed to modify the 1984 channel plan for the 50 kilohertz wide Group N₁ and 25 kilohertz wide N₂ 450 MHz Remote Pickup channels. Specifically, the Commission proposed to standardize the Remote Pickup channel plan with the Part 90 channel plan by listing channels 6.25 kilohertz apart and allowing licensees to stack up to 8 channels (50 kilohertz). The Commission stated that, although Part 74 licensees do not share this band with Part 90 licensees, by aligning to the Part 90 channel plan BAS licensees in this band will reap the same benefits as those expected for the VHF band. The Commission also observed that, similar to the VHF band, its database shows that most licensees continue to operate on the pre-1984 channel plan, although some licensees have begun migrating to the 1984 channel plan."

109. To accommodate all licensees who are operating in compliance with the 1984 channel plan, the Commission proposed in the *Notice* to give them three years from the date a new channel plan is adopted to modify their equipment and comply with the new plan. The Commission stated that this would provide licensees adequate time to either retune or replace equipment. However, because the number of licensees affected by our proposals is small, the Commission proposed to provide them the option to continue operating using the 1984 channel plan after the three year transition period ends, but only on a secondary, non-interference basis. The Commission stated that this course of action will minimize disruption to existing Remote Pickup BAS systems. Finally, the Commission noted that this proposal is consistent with the treatment of Part 90 licensees that were operating on 5 kilohertz channels in the VHF band prior to the *Refarming* proceeding."

110. In the *Notice*, the Commission also noted that the 10 megahertz wide Group P channels are limited to operational communications, including tones for signaling and for remote control and automatic transmission system control and telemetry." Because there are only eight Group P channels (four at each end of the band) and they are limited to this specialized use, the Commission stated that it was not inclined to alter them, but noted that, in light of the technological advances in radio, it was not convinced that the 50 kilohertz wide Group R and 100 kilohertz wide Group S channels are still needed. The Commission declined to make specific proposals for these three groups of channels, but sought comment on the extent to which these channels are being used and asked whether their current bandwidth designations should be maintained or aligned with the 6.25 kilohertz channel plan.²¹⁴

111. Finally, the Commission stated in the *Notice* that, because Remote Pickup Service licensees will benefit most by having the capability to choose from a wide variety of radios, and in accordance with the Commission's proposal to standardize the Remote Pickup channels with those listed

²¹⁰ *Id.* at ¶ 67

²¹¹ *Id.* at ¶ 68.

²¹² *Id.* at ¶ 69. See Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency assignment Policies of the Private Land Mobile Radio Services, PR Docket No. 92-235, *Memorandum Opinion and Order*, 11 FCC Rcd 17676 (1996).

²¹³ 47 C.F.R. § 74.402. Note 6

²¹⁴ *Notice* at ¶ 70.

in Pan 90, it believed that this service should adhere to the technical standards of Part 90. In this way, Part 74 licensees could choose from among the wide variety of radios available for PLMKS licensees. Accordingly, for equipment designed to operate on channels with bandwidths of 30 kilohertz or less in the VHF and UHF Remote Pickup Service bands, the Commission proposed that the equipment comply with the Part 90 technical rules for the emission mask²¹⁵ and frequency stability.²¹⁶ Additionally, the Commission asked commenters to address whether the transient frequency behavior²¹⁷ rules in Section 90.214 would be appropriate to impose on Remote Pickup service transmitters.²¹⁸

112. Only SBE commented on this issue. SBE endorses the proposals to modify the channel plan consistent with the current Part 90 channel plan (*i.e.*, stackable 7.5 kilohertz channels in the 150/160 MHz band and stackable 6.25 kilohertz channels in the 450 MHz band). Because licensees will have the option of using narrowband Pan 90 radios, SBE believes that this change will benefit licensees through significantly lower Remote Pickup equipment costs, especially with respect to dispatch and operational traffic.²¹⁹ To minimize the impact on current licensees, SBE recommends that no new restrictions be imposed on allowable types of modulation on these channels. In addition, it supports the proposal to provide a three year transition period for licensees to migrate to the new channel plan, including the option to remain on current channels on a secondary basis after three years.

113. With respect to technical parameters, SBE concurs with our proposal to apply the Part 90 emission masks and frequency stability requirements to narrow band Remote Pickup stations. It urges, however, that we maintain the current requirements for 25 kilohertz or wider channels in Groups N₁ and N₂ and wideband channels in Groups R and S. It states that coordinators have already implemented plans, including adjacent channel offsets, to accommodate these wide channels. SBE also recommends that we harmonize the Group P channels with the plan proposed for the Group N₁ and N₂ channels by rechannelizing them to 6.25 kilohertz stackable to 12.5 kilohertz. Finally, SBE recommends grandfathering existing licensees using 10 kilohertz Group P channels.²²⁰

114. *Discussion.* As described above, the only commenter on this issue, SBE, supports our proposals with some modification. We agree with their suggestions and adopt our proposals as modified by those suggestions. Therefore, we will amend the channel plan for 150 MHz and 160 MHz Remote Pickup stations to list channels every 7.5 kilohertz and allow licensees to stack up to four channels for a total of 30 megahertz. In addition, we will modify the Group N₁ and N₂ 450 MHz channels to list channels every 6.25 kilohertz and allow licensees to stack up to eight channels for a total of 50 megahertz. As suggested by SBE, we will also modify the Group P channels to list them every 6.25 kHz

²¹⁵ 47 C.F.R. § 90.210.

²¹⁶ 47 C.F.R. § 90.213.

²¹⁷ Transient frequencies are short-term variations of a transmitter's operating frequency that occurs when a transmitter is keyed on or off. During this period of off-frequency operation noise chirps are transmitted that could interfere with adjacent channel operations.

²¹⁸ 47 C.F.R. § 90.214. *Notice* at ¶ 71

²¹⁹ SBE Comments at 15-16. SBE additionally states that Part 90 narrowband radios may not suit audio program feeds requiring high fidelity and no real-time delay.

²²⁰ *Id.* at 16-17.

and allow licensees to stack up to two channels.²²¹ Further, we will require new Remote Pickup station equipment designed to operate on channels 30 kilohertz wide or less to comply with the Part 90 technical standards, including emission mask, frequency tolerance, and transient frequency behavior. By harmonizing all RPU channels and equipment with the Part 90 PLMR channel plan, licensees will benefit from economies of scale resulting from the use of equipment consistent with Part 90 operations. Additionally, this will simplify station coordination and reduce the potential for harmful interference.

115. To ease the transition to this new channel plan, we adopt our proposal to provide a three-year period for licensees operating on the channels adopted in 1984 to modify their licenses to the new channels. After three years, they may remain on their current channel assignments, but on a secondary, non-interference basis. Consistent with our action for the N₁ and N₂ channels we will also provide three years to licensees operating on the 10 kilohertz P channels to modify their licenses to the new channel plan. After that time they may remain on their current channel assignment but on a secondary basis. This will provide for a smooth transition to the new channels where incumbent operations will not inhibit the growth of systems on the new frequency plan.

6. Federal Narrowbanding of 162-174 MHz Band Land Mobile Frequencies

116. The Interdepartment Radio Advisory Committee" (IRAC) has been working to reduce the bandwidth of Federal Government land mobile operations in a number of frequency bands, including the 162-174 MHz band. Based on the work of the IRAC, the National Telecommunications and Information Administration (NTIA) adopted a policy which requires all new Federal Government systems after January 1, 1995, and all Federal Government systems after January 1, 2005, in the 162-174 MHz band to be capable of operating within a 12.5 kilohertz channel." Under our rules, Remote Pickup BAS may, with certain geographic restrictions, use the frequencies 166.25 MHz and 170.15 MHz on a secondary basis to Federal Government use.²²⁴ The rules currently allow licensees on these channels to operate on 25 kilohertz channels²²⁵ and do not provide any procedures for transitioning to narrower 12.5 kilohertz channels. In addition, these two frequencies are used in the Emergency Alert System (EAS)²²⁶ in some areas to relay information to local stations for dissemination to the public."

²²¹ The new channel centers resulting from modifying the Group P channels are: 450.00625 MHz, 450.0125 MHz, 450.01875 MHz, 450.025 MHz, 450.98125 MHz, 450.9875 MHz, 450.99375 MHz, 455.00625 MHz, 455.0125 MHz, 455.01875 MHz, 455.025 MHz, 455.98125 MHz, 455.9875 MHz, and 455.99375 MHz.

²²² The IRAC is chaired by the Department of Commerce/NTIA and consists of representatives from a number of Federal Agencies and assists the Assistant Secretary of Commerce for Communications and Information in assigning frequencies to U.S. Government radio stations and in developing and executing policies, programs, procedures, and technical criteria pertaining to the allocation, management, and use of the spectrum. See NTIA Manual of Regulations and Procedures for Federal Frequency Management (NTIA Manual), Section I.3.

²²³ See NTIA Manual, Section 4.3.7A. The bands subject to Federal Government narrowbanding are 162.0125-173.2 MHz and 173.4-174 MHz.

²²⁴ 47 C.F.R. § 74.402. The exceptions are within 150 miles of New York City, where these frequencies are reserved for use by public safety users; in Alaska; or in the Tennessee Valley Authority area. The Tennessee Valley Authority Area is described in detail in Footnote US11. This area encompasses Tennessee, the southern portion of Kentucky, southwest Virginia, most of Mississippi and Alabama, Northern Georgia, the northwest corner of South Carolina, and western North Carolina.

²²⁵ 47 C.F.R. § 74.462

²²⁶ 37 C.F.R. Part 11

Despite this secondary status, it has been the policy of NTIA and the FCC to protect stations used for EAS from harmful interference.

117. To ensure continued successful sharing of the spectrum with Federal Government users, we proposed to conform Remote Pickup BAS use of the 166.25 MHz and 170.15 MHz frequencies to the 12.5 kilohertz channel size, and to meet the January 1, 2005 implementation schedule applicable for all Federal Government users. We sought comment on the advantages and disadvantages of implementing this proposal for BAS licensees, notwithstanding the need for new equipment. We asked if migrating to the narrow channels would degrade the quality of the information being transmitted. Additionally, we proposed to formally acknowledge the protected status of non-Federal Government stations operating on these frequencies that are used as an integral part of the EAS. We sought comment on these proposals as well as proposed amendments to Section 2.106, footnote US11, and Section 74.462 of our rules to implement these proposals.²²⁸

118. SBE and NTIA were the only parties commenting on this issue. SBE supports our proposals to mandate the conversion of Remote Pickup BAS to 12.5 kilohertz channels on 166.25 MHz and 170.15 MHz by January 1, 2005. SBE also suggests that Remote Pickup BAS base station use of 166.25 MHz and 170.15 MHz for EAS be upgraded to co-primary status with Federal Government use. It states that this would be consistent with the National Aeronautics and Space Administration's (NASA) use of 2 GHz BAS band, which was upgraded to primary status in the *Second Report and Order and Second Memorandum Opinion and Order* in ET Docket No. 95-18.²²⁹ NTIA supports a different approach. It asks that Remote Pickup BAS base stations operating on these frequencies be given only "protected" status, which would give them the same protection that currently is accorded them.²³⁰

119. *Discussion: Conforming the technical standards for BAS operations at 166.25 MHz and 170.15 MHz to those of the Federal Government would protect Federal Government operations and provide benefits to Remote Pickup BAS users.*" For example, it would simplify coordination and

(Continued from previous page)

²²⁷ Notice at ¶¶ 72-13.

²²⁸ *Id.* at ¶ 73

²²⁹ SBE Comments at 16. See Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, *Second Report and Order and Second Memorandum Opinion and Order*, ET Docket No. 95-18, 15 FCC Rcd 12315 (2000). In this proceeding, NTIA asked the Commission to provide primary status to Government space operations, earth exploration satellites, and space research in the 2025-2110 MHz band. NASA stated that it had been using this band for almost thirty years for satellites which support such major programs as the Space Shuttle, the Hubble Space Telescope, the Tracking and Data Relay Satellite System and will use this spectrum to support the International Space Station. The Commission concluded that in view of the successful sharing between BAS and Government satellite operations in the past, Government satellite operations could be elevated to co-primary status. It stated that this change would provide increased certainty and clarity to the U.S. Table of Frequency Allocations. The Commission, however, did express concern about the impact of this change on the future deployment of BAS and adopted measures to minimize such impact.

²³⁰ Letter to Mr. Bruce Franca, Acting Chief, Office of Engineering and Technology, Federal Communications Commission, from William T. Hatch, Associate Administrator, Office of Spectrum Management, National Telecommunications and Information Administration, United States Department of Commerce, Aug. 7, 2001.

²³¹ Our action here does not amend the rules for public safety stations operating on 166.25 MHz or 170.15 MHz under the rules in 47 C.F.R. § 90.20. The Commission will address service rules for those stations in a future proceeding.

improve adjacent channel performance. Therefore, in accordance with the comments of SBE and our proposal, we are amending the rules to require that existing and applied for Remote Pickup BAS facilities on 166.25 MHz and 170.15 MHz use no more than 12.5 kilohertz channel bandwidth by January 1, 2005.

This will apply to all stations on these frequencies that obtained licenses or applied for licenses on or before the effective date of the rules in this *Report and Order*.²³² This approach will ensure that existing licensed stations and applicants who are planning stations on these frequencies have adequate time to transition to narrowband equipment. To further ease this transition, we **will** not require licensees to modify their licenses. Instead, the Commission will automatically issue a superseded license, effective January 1, 2005, showing the reduction in authorized bandwidth.²³³ Additionally, in the event that the January 1, 2005 deadline for Federal Government systems is extended, we will consider amending the Rules to implement the extension for Non-Government systems on the 166.25 MHz and 170.15 MHz frequencies as well. Stations applied for after the effective date of the rules in this *Report and Order* must comply with the 12.5 kilohertz channel bandwidth requirement. Rather than placing these requirements in footnote US11 as proposed, we will instead amend Section 74.462.²³⁴ This action is appropriate as it consolidates all Remote Pickup BAS service rules in one place.

120. With respect to Remote Pickup BAS base stations operating as an integral part of the EAS, we are adopting a procedure recommended by NTIA to ensure that such stations will be protected.²³⁵ Under this procedure NTIA will place a notation in the Government Master Frequency (GMF) database licensing record of these stations which will require Government stations to protect them from harmful interference.²³⁶ Thus, there is no need to amend footnote US11.²³⁷

7. 950 MHz Aural BAS Channel Splits

121. **950 MHz Aural BAS Channel Splits.** The *Report and Order* in MM Docket 85-36²³⁸ specified that the 950 MHz Aural BAS Channel Plan listed in Section 74.502(b) would become effective

²³² We note that as of August 29, 2002, there is only one application pending for new Remote Pickup BAS use of 166.25 MHz or 170.15 MHz.

²³³ We cannot predict the exact date on which the Commission will issue the superseded license at this time. However, the effective date of the license will be January 1, 2005 regardless of whether the license is issued prior to or subsequent to that date. Thus, on January 1, 2005 all licensees on 166.25 MHz and 170.15 MHz will be required to operate on 12.5 kilohertz channels.

²³⁴ 47 C.F.R. § 74.462

²³⁵ Originally, NTIA recommended that these BAS stations be given "protected" status. However, such a status is not defined in our rules.

²³⁶ See Letter to Mr. Edmond J. Thomas, Chief, Office of Engineering and Technology, Federal Communications Commission, from Fredrick R. Wentland, Acting Associate Administrator, Office of Spectrum Management, National Telecommunications and Information Administration, United States Department of Commerce, Aug. 6, 2002.

²³⁷ We are, however, making editorial changes to footnote US11 to improve its readability.

²³⁸ See Review of Technical and Operational Requirements: Part 74-E Aural Broadcast STL and ICR Stations; and Part 74-F TV Auxiliary Broadcast Stations, *Report and Order*, MM Docket No. 85-36, 102 F.C.C.2d 940 (FCC 85-588) (1985) (*950 MHz Rechannalization Order*). The *Y50 MHz Rechannalization Order* at ¶ 29 amended these rules to be effective on the date specified in a future order by the Chief, Mass Media Bureau, indicating computer programs are available for implementing the new rules.

upon a future Order from the Commission to be issued when the licensing system was capable of accommodating this channel plan. With the implementation of ULS for licensing, we are implementing that rule section with this *Report and Order*.

C. Universal Licensing System and **BAS**

122. The ULS is an automated licensing system and integrated database designed to provide greater efficiency in the licensing process by using a consolidated set of application forms, automating many license review processes, and facilitating electronic application filing and data retrieval. The Commission's WTB, which is responsible for licensing **BAS**, began using ULS for Aural and TV **BAS** licensing in August, 1999²³⁹ and for Remote Pickup **BAS** in September, 2000.²⁴⁰ As a result, several **BAS** service rules require updating to reflect new ULS application processing procedures. Many of these changes, such as updating application form numbers, are ministerial in nature and are being adopted without discussion.²⁴¹ In other cases, more substantive rule changes are necessary and are discussed below.

1. Application Procedures and Construction Periods

123. The *ULS Report and Order* consolidated the application and processing rules for all wireless services into Subpart F of Part I,²⁴² now the only rule section that wireless applicants and licensees, including **BAS** applicants and licensees, must consult regarding application procedures, such as those as for amendments, modifications, and STAs.²⁴³ In the *Notice*, the Commission proposed to amend Sections 1.901 and 1.902 to add the appropriate references to Part 74 and to add a new section, Section 74.6, to reference the application and processing rules in Part I, Subpart F. Under this proposed licensing scheme, aural and **TV BAS** stations would be licensed using identical forms and procedures as used for Part 101 microwave applicants. Remote Pickup **BAS** stations would be licensed using the same forms and procedures that are used for Part 90 PLMRS applicants.²⁴⁴

124. In the *ULS Report and Order*, the Commission adopted rules that eliminate letter requests for all purposes where a form can be used,²⁴⁵ stating that this will, "reduce applicant and licensee

²³⁹ See Wireless Telecommunications Bureau To Begin Use Of Universal Licensing System (ULS) For Microwave Services On August 30, 1999, DA 99-1543, *Public Notice*, rel. Aug. 6, 1999.

²⁴⁰ See Wireless Telecommunications Bureau Implements Phase I Of a Three-Phased Deployment of the Universal Licensing System for Land Mobile Radio Services on September 19, 2000, DA 00-1992, *Public Notice*, rel. Sep. 1, 2000.

²⁴¹ These changes were included in proposed rules. See *Notice* at Appendix C.

²⁴² See Biennial Regulatory Review –Amendment of Parts 0, 1, 13, 22, 24, 26.27, 80, 87, 90, 95, 97, and 101 of the Commission's Rules to Facilitate the Development and Use of the Universal Licensing System in the Wireless Telecommunications Services, WT Docket No. 98-20, *Report and Order*, 13 FCC Rcd. 21027 (1998) (*ULS Report and Order*), at 21055.

²⁴³ 47 C.F.R. §§ 1.929 and 1.931.

²⁴⁴ *Notice* at ¶ 75

²⁴⁵ See *ULS Report and Order* at 21052

burdens, increase efficiency and better serve the public interest.”” In keeping with this policy and the stated benefits, the Commission proposed in the *Notice* to amend the Part 74 rules for **BAS** to eliminate the informal application for STA²⁴⁷ and require that STA requests follow the procedures outlined in Section 1.931.²⁴⁸

125. Under the Part I, Subpart F rules, the Commission issues a license which specifies the construction period set forth in the rule part governing the specific service. Licensees are to notify the Commission when operations commence, and licensees that fail to commence operations within the required construction period automatically forfeit their license.²⁴⁹ In order to align **BAS** construction rules with these requirements, and with current practices regarding construction periods for **BAS**, the Commission also proposed in the *Notice* to amend certain rules in Part 73 and create a new Section 74.34. This new section references the construction requirements in Subpart F of Part I; a construction period of 12 months – the period allowed for PLMRS stations authorized under Part 90 – for Remote Pickup **BAS**; and a construction period of 18 months for TV and aural **BAS** stations.²⁵⁰

126. Commenting parties generally support the proposals set forth in the *Notice* regarding **BAS** applications procedures.” **SBE**, however, asks that ULS be modified to allow both transmit and receive locations to be specified on Form 601 for remote pick-up stations used as point-to-point telemetry return links, to more accurately reflect how such stations are used.²⁵² **SBE** and **MSTVMAB** support the proposals regarding **STA** procedures for **BAS**.” **SBE** points out, however, that requiring **BAS** STAs to follow Section 1.931 procedures would require electronic filing.”

127. commenting parties also support the proposals regarding **BAS** construction requirements.²⁵⁵ **KNME** states that the construction periods proposed in the *Notice* would discourage hoarding by speculative applicants. **KNME** also urges that we require a licensee to file a certification of completion of construction via the ULS, to track false construction claims.²⁵⁶ Similarly, **SBE** states that the proposed periods are more than adequate for any applicant who truly intends to build, and not just

²⁴⁶ *Id.*

²⁴⁷ 47 C.F.R. §§ 74.433(b), 74.537(b), and 74.633(b). An informal application has generally been interpreted to mean a letter request.

²⁴⁸ *Notice* at ¶ 78.

²⁴⁹ 47 C.F.R. § 1.946.

²⁵⁰ *Notice* at ¶¶ 76-77

²⁵¹ See, e.g., **MSTVMAB** Comments at 11; **SBE** Comments at 17; **Viacom** Reply Comments at 3. **Viacom** states that it supports the comments of **MSTV/NAB** and **SBE**.

²⁵² **SBE** Comments at 17, 25

²⁵³ **SBE** Comments at 17; **MSTVNAB** Comments at 12.

²⁵⁴ **SBE** Comments at 17

²⁵⁵ **SBE** Comments at 17; **MSTV/NAB** Comments at 12; **KNME** Reply Comments at 1

²⁵⁶ **KNME** Reply Comments at 1

“warehouse” frequencies.”

128. Discussion. We are adopting our proposals from the *Notice* regarding applications and STA filing procedures. We are amending Sections 1.901 and 1.902 to reference Part 74 and are adding a new Section 74.6²⁵⁸ to reference BAS applicants and licensees to the application and processing rules in Part 1, Subpart F. These changes will simplify our rules and result in processing efficiencies for **BAS** licensing. We observe that specific changes to the ULS system, including forms, affect multiple services. Thus, we lack adequate notice to all potentially affected services and we therefore decline to adopt changes to Form 601 as requested by SBE.²⁵⁹ We note that no commenter opposes our proposal with respect to **STAs**. Therefore, we are also adopting the proposals amending Part 74 to require that **BAS STA** requests follow the procedures outlined in Section 1.931. We clarify that electronic filing is not required for **STAs**; they may be filed either electronically or manually.²⁶⁰

129. We are also adopting the proposed rule amendments to remove the construction requirements for BAS stations from Part 73 and place them in a new Section 74.34. This approach will promote timely construction of facilities, ensure consistent construction requirements among the services, and prevent warehousing of spectrum. As for the concern of KNME that licensees be required to file a certification of completion of construction, we note that the rules already require licensees to file a notification of completion of construction. Failure to file such a notification results in the termination of the license by the Commission.²⁶¹

2. Classification of Filings as Major or Minor

130. In the *ULS Report and Order*, the Commission adopted rules to define certain actions as major changes for all wireless services. Additionally, the Commission adopted rules which define major changes for each service category. Minor changes are defined as all changes that are not major.²⁶² These designations when used in conjunction with other adopted rule amendments assist the Commission in streamlining the licensing process. As an example, Section 1.947(b) allows applicants to make minor modifications to their stations without prior Commission approval so long as they file an application form within thirty days of making such a modification.²⁶³ ULS can automatically determine if an

²⁵⁷ SBE Comments at 17

²⁵⁸ We are revising the text of the proposed Section 74.6 to clarify that applicants for Remote Pickup, aural BAS, **TV BAS**, and low power auxiliary stations under Subparts D, E, F, and H of Part 74 may file manually or electronically under Part 1 procedures.

²⁵⁹ Commenters also requested several other changes to the ULS processing and search capabilities. See SBE Comments at 24-26; SBE Reply Comments at 8; Viacom Reply Comments at 4. We note that these functions of the licensing system are not subject to rulemaking and are not addressed herein. Comments and concerns regarding upgrades and enhancements of the ULS should be addressed to the Wireless Telecommunications Bureau.

²⁶⁰ See Appendix A, *infra*, at § 74.6

²⁶¹ 47 C.F.R. § 1.946(d).

²⁶² See *ULS Report and Order* at 21058.

²⁶³ 41 C.F.R. § 1.947(b)

application for modification is major or minor, and can then process these applications without the need for intervention by Commission staff.'"

131. Accordingly, the Commission proposed to amend the Part 74 rules to adhere to the procedures adopted in the ULS proceeding for major and minor amendments and modifications; *i.e.*, amendments to aural and TV **BAS** applications and modifications to aural and TV **BAS** licenses would be evaluated based on the rules defining a major change in Sections 1.929(a) and 1.929(d), and Remote Pickup **BAS** applications would follow the rules set forth in Sections 1.929(a) and 1.929(c)(4). In many cases, the rules adopted in the *ULS Report and Order* provide more flexibility than is afforded **BAS** licensees under Part 74. For example, Sections 74.551 and 74.651 require aural and TV **BAS** licensees to file an application and obtain Commission approval for any change in which the location of the transmitting antenna changes. but Section 1.929(d)(1)(i) classifies changes in transmitting antenna location that are 5 seconds or less in latitude and/or longitude as minor.'"' The proposal made in the *Notice* would implement rule changes that treat **BAS** applicants in a consistent manner with the treatment given other wireless services.'"

132. Although commenting parties generally support the proposals set forth in the *Notice*,²⁶⁷ several express some concern. MSTV/NAB urge that full coordination be required for all station modifications, whether major or minor.²⁶⁸ For example, they state that a 5 second change in latitude and/or longitude by a **BAS** transmitting antenna (a minor change under the ULS rules) could create interference to other licensees in congested areas if not fully coordinated. **SBE** agrees and also requests that frequency coordination be required for all changes from analog to digital modulation because digitally modulated signals which tend to more fully occupy the channel bandwidth than analog signals, increase the possibility of interference from **BAS** stations into adjacent channel **FM** receivers.²⁶⁹ MRC recommends that if a **BAS** licensee coordinates with a local coordinating body, conversion from analog to multiplexed digital/analog operation should be treated as a minor amendment.'"

133. *Discussion.* We are adopting our proposals to amend the Part 74 rules so that **BAS** applicants and licensees are subject to the same rules as specified for the land mobile and microwave services for determining major and minor application and license changes. This action will align Remote Pickup **BAS** processing rules with those for similar services under Part 90 and align the rules for TV and aural **BAS** with the rules for Part 101. Thus, similar stations will be treated in a consistent manner.

134. With regard to the concerns of MSTV/NAB, **SBE**, and MRC, we note that changes in emissions, such as a conversion from analog to digital modulation or to composite analog/digital modulation, are already classified as major changes under the rules in Sections 1.929(c)(4)(ii) and

²⁶⁴ *Notice* at ¶ 79

²⁶⁵ 47 C.F.R. § 1.929(d)(1)(i).

²⁶⁶ *Notice* at ¶ 80

²⁶⁷ **SBE** Comments at 17-18; MSTV/NAB Comments at 17; MRC Comments at 7

²⁶⁸ MSTV/NAB Comments at 12, 15.

²⁶⁹ **SBE** Comments at 1-2, 17,

²⁷⁰ MRC Comments at 7.

(d)(1)(iv),²⁷¹ and frequency coordination would be required when a major change is requested.” With regard to location changes of less than 5 seconds in latitude and/or longitude,²⁷³ we note that the Commission in the *ULS Reconsideration Order*²⁷⁴ clarified that such minor changes are not exempt from the coordination requirement. The Commission explained that an applicant requesting a minor change must still coordinate as required by Section 101.103(d)(2)(ix) prior to implementing the change and that this process is sufficient to ensure that minor changes are properly coordinated to avoid harmful interference, without imposing an unnecessary tiling burden on applicants.” We find that this procedure will work equally well for Part 74 services.

3. Emission Designators

135. Section 74.462 of the Commission’s rules specifies authorized emissions for Remote Pickup BAS frequencies and frequency bands.²⁷⁶ In the *Notice*, the Commission observed that this section contains emission designators that no longer conform to current ITU specifications or to those contained in Subpart C of Part 2 of the Commission’s rules.” For example, F3Y, which was the original emission designator for digitized voice modulation, is specified for most of the Remote Pickup BAS frequency bands. This emission designator should now be updated to F1E (frequency modulated single-channel digital telephony) or G1E (phase modulated single-channel digital telephony) emission. Accordingly, in the *Notice* the Commission proposed to update Section 74.462 to replace all outdated emission designators with emission designators that conform to ITU specifications and Part 2 rules.²⁷⁸

136. SBE and MSTVMAB both support the proposal set forth in the *Notice* to update emission designators to conform to ITU specifications and Part 2 rules.

137. *Discussion:* This proposal was supported by SBE and MSTVMAB and was not opposed by any commenter.” Thus, we are adopting our proposal and updating the emission designators of

²⁷¹ 47 C.F.R. § 1.929

²⁷² 47 C.F.R. § 101.103(d)(1).

²⁷³ A change of 5 seconds in latitude corresponds to a distance of approximately 150 meters (500 feet)

²⁷⁴ Biennial Regulatory Review – Amendment of Parts 0, 1, 13, 22, 24, 26, 27, 80, 87, 90, 95, 91, and 101 of the Commission’s Rules to Facilitate the Development and Use of the Universal Licensing System in the Wireless Telecommunications Services, *Memorandum Opinion and Order on Reconsideration*, WT Docket No. 98-20, 14 FCC Rcd 11476 (1999) (*ULS Reconsideration Order*).

²⁷⁵ *ULS Reconsideration Order* at ¶¶ 15-16; 47 C.F.R. § 101.103

²⁷⁶ 47 C.F.R. § 74.462. Footnote 4 of this rule section states that the emission designators will be modified after necessary modifications are made to BAS application processing programs are completed.

²⁷⁷ See ITU Radio Regulations, Appendix I, Classification of Emissions and Necessary Bandwidths; 47 C.F.R. § 2.201.

²⁷⁸ *Notice* at ¶ 81

²⁷⁹ SBE Comments at 19. MSTV/NAB Comments at 12

Section 74.462.²⁸⁰

D. Additional BAS Issues

138. In addition to our proposals, several commenters request that the Commission address additional issues. These include narrowband channel plans for digital BAS operations;²⁸¹ reallocation of the 1.7 GHz band for public safety;²⁸² eligibility and permissibility of wireless microphones for game communications;²⁸³ codification of co-equal status of BAS and public safety licensees at 2450-2483.5 MHz;²⁸⁴ addition of special conditions for experimental authorizations on broadcast or BAS frequencies;²⁸⁵ and elimination of priority of use exemptions for Remote Pickup BAS I and R channels.²⁸⁶ These issues were not raised in the *Notice* and thus lack adequate notice to all potentially affected parties. We therefore decline to address them here.²⁸⁷

²⁸⁰ The updated list of emission designators in Section 74.462(b) have been expanded from those proposed to include non-voice digital traffic. Their omission in the *Notice*, was an oversight as telegraphy, telemetry, and data are currently permitted.

²⁸¹ Comsearch Comments at 2; MRC Comments at 9; TIA Reply Comments at 2

²⁸² See MRC Comments at 10.

²⁸³ See SBE Comments at 22-24.

²⁸⁴ See SBE Comments at 24.

²⁸⁵ See SBE Comments at 26-27.

²⁸⁶ See SBE Comments at 27. Priority of use in Section 74.403(b) provides a ranking of Remote Pickup BAS transmissions to be observed when more than one licensee attempts to use the same frequency in the same area. 47 C.F.R. § 74.403. The priorities, from highest to lowest, are: 1) emergency communications, 2) program material for broadcast, 3) cues and orders necessary to a broadcast, 4) operational communications, and 5) tests or drills. Currently certain channels are exempted from the priority of use rules. SBE suggests that we amend the rules for a subset (I- and R- channels) of the currently exempted channels so that they are subject to the priority of use rules. The I-channels are 20 kHz channels on 26.07 MHz, 26.11 MHz, and 26.45 MHz. The R-channels are 25 kHz channels, stackable to 50 kHz, in the 450.625-450.875 MHz and 455.625-455.875 MHz bands. We did not propose to change this rule and no party responded to SBE's suggestion. Without sufficient comment, we are concerned that interested parties have not had sufficient notice to comment on this issue, and that a change to these channels could disrupt a licensee's operations.

²⁸⁷ Commenters may ~~file~~ **always file** a petition for rulemaking to the Commission regarding their specific concerns. In many cases, there is an on-going Commission proceeding where these concerns can be addressed. For example, in ET Docket No. 00-258, the Commission recently reallocated the 1.7 GHz band for Advanced Wireless Services. See, Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, **Second Report and Order**, FCC 02-304 (adopted November 7, 2002). In addition, we note that the Commission has recently clarified that public safety and BAS share the 2450-2483.5 MHz band on a co-equal basis and therefore current rules are sufficient. See County of Los Angeles, City of Los Angeles, City of Long Beach, and City of Burbank, California, Request for Declaratory Ruling Regarding Use of the 2450-2483.5 MHz Band for Airborne Video Public Safety Communications. **Order**, 16 FCC Rcd 2217 (2001) at ¶¶ 4-5.

E. AMPTP Petition

139. Video assist devices produce low resolution images that can be used by a production crew to make decisions with respect to content, lighting, and image framing.” Often, these video assist devices are connected via cable. However, cable is not always practical due to the distance from the camera to the video monitor or because the camera needs to be mobile to follow the action.²⁸⁹ Also, when cables are used, a staff person must tend to them to ensure the safety of the actors and the crew.²⁹⁰ To improve their utility and increase safety, the Commission, based on a petition filed by AMPTP,” proposed to allow the use of wireless assist video devices (WAVDs) on a secondary, non-interference basis on unused TV channels in the upper VHF and the UHF bands.

1. Authorization of WAVDs

140. The *Notice* proposed that WAVDs be authorized as low power auxiliary stations on a non-interference basis to any existing or future allocated services operating in accordance with the Table of Allocations in Part 2 of our rules.” Further, the *Notice* proposed that WAVD users be responsible for correcting any instance of harmful interference using any means necessary, up to and including shutting down the transmitter. Consistent with the treatment of wireless microphones in this spectrum, the *Notice* did not propose to change the existing broadcasting service allocation.²⁹³

141. AMPTP and SBE support the *Notice*’s proposal to authorize WAVDs. SBE asks, however, that the secondary status of WAVDs be clarified by defining their transmissions as “operational communications” under Section 74.403(b).²⁹⁴ In its reply, AMPTP opposes SBE’s proposal to classify WAVDs as “operational communications.” AMPTP states that it would support an effort to place WAVDs in the priority of communications list, but only after it has an opportunity to monitor the efficiency of, and the demand for WAVDs. Otherwise, AMPTP argues their development and transition into the marketplace could be hindered.²⁹⁵

142. *Discussion.* For the reasons stated in the *Notice* and based on the comments, we are adopting our proposal to allow the use of WAVDs on a secondary, non-interference basis on vacant upper VHF-TV and UHF-TV channels. Specific details regarding the operation of these devices are

²⁸⁸ See AMPTP Petition at 2-3.

²⁸⁹ *Id.* at 3

²⁹⁰ *Id.*

²⁹¹ AMPTP Petition, RM-9856, filed November 15, 1999.

²⁹² 41 C.F.R. § 2.106.

²⁹³ *Notice* at ¶ 94. The 470-512 MHz band is also allocated to land mobile radio services.

²⁹⁴ SBE Comments at 19. 47 C.F.R. § 74.403(b) establishes a priority for remote pickup transmissions: (1) Communications during an emergency or pending emergency directly related to the safety of life and property; (2) Program material to be broadcast; (3) Cues, orders, and other related communications immediately necessary to the accomplishment of a broadcast; (4) Operational communications; and (5) Tests or drills to check the performance of stand-by or emergency circuits.

²⁹⁵ *Id.* at 6-7

discussed in detail below. With respect to SBE's request to classify WAVD transmissions as "operational communications," we note that those rules pertain to Remote Pickup BAS stations. In the *Notice*, we proposed to authorize WAVDs as low power auxiliary stations under Part 74, Subpart H. We continue to believe that this is the appropriate subpart in which to place WAVDs due to their similarity to existing low power auxiliary devices, rather than the Remote Pickup BAS rules. If after gaining experience with WAVDs, we determine that communications on television channels needs to be prioritized, we can revisit this issue.

2. Eligibility, Permitted Use, and Licensing

143. The *Notice* proposed that all entities eligible to hold a Part 74 license, including motion picture and television producers as defined in Section 74.801, be eligible to operate WAVDs.²⁹⁶ The *Notice* proposed to limit WAVD use to production facilities or locations used to produce material being filmed or taped for later showing on television broadcast stations. Under this proposal, WAVDs could not be used for ENG operations or to assist with the production of live events. Additionally, the *Notice* proposed that WAVDs be excluded from operating under the short-term operation rules used by other Part 74 licensees.²⁹⁷ These proposed restrictions are intended to minimize the possibility for interference.²⁹⁸

144. The *Notice* also proposed that WAVD users obtain an FCC station license using FCC Form 601, Main Form and Schedule H,²⁹⁹ prior to operating. We proposed that the license term for a WAVD license be concurrent with the normal licensing period for TV broadcast stations located in the same area of operation. This is consistent with the licensing term for other BAS stations.³⁰⁰ The *Notice* further proposed that a WAVD licensee not be geographically limited, but be subject only to channel separation and notification rules. Additionally, because of the proposed limited eligibility for WAVDs and the nature of their use, the *Notice* proposed that WAVD licenses be non-assignable and non-transferable.³⁰¹

145. AMPTP agrees with the proposal to restrict WAVD use from ENG and the production of live events.³⁰² It also agrees with the restriction on assignment and transfer of WAVD licenses.³⁰³ However, it requests that WAVD use be expanded to allow the use of WAVDs in the production of cable, satellite, and motion picture events.³⁰⁴ Further, AMPTP anticipating that independent contractors may

²⁹⁶ 47 C.F.R. § 74.801. These definitions refer to persons or organizations engaged in the production of motion pictures or television programs.

²⁹⁷ The short-term operation rule allows eligible entities to operate using BAS frequencies for up to 720 hours per year without an authorization from the Commission. See 47 C.F.R. § 74.24.

²⁹⁸ *Notice* at ¶ 95

²⁹⁹ FCC Form 601, Schedule H is used to provide technical data for certain BAS stations, including remote pickup stations and wireless microphones.

³⁰⁰ 47 C.F.R. § 74.15

³⁰¹ *Notice* at ¶¶ 90-91

³⁰² AMPTP Comments at 4.

³⁰³ AMPTP Reply Comments at 5

³⁰⁴ AMPTP Comments at 4

desire to operate WAVDs and rent them to production studios, asks that the Commission specifically permit third party rental. It states that such rentals could be restricted, if needed, to only those directly involved in authorized television and motion picture programming to avert unauthorized or frivolous use.³⁰⁵

146. SBE expresses caution regarding third party contractors. SBE urges that the FCC not allow WAVD licenses to be assignable to independent contractors. It states that the necessary responsibility and accountability borne by a WAVD licensee would be diluted if third-party contractors were allowed to operate WAVDs under the license obtained by a production studio. Instead, SBE recommends that an independent contractor obtain its own license for a WAVD to ensure proper WAVD use.³⁰⁶ AMPTP, in reply comments states that licensees can be held accountable for full compliance with the Commission's rules by end users and that third party rental should be allowed.³⁰⁷

147. *Discussion.* We are adopting our proposal to permit all entities eligible to hold Part 74 licenses to use WAVDs. As stated above, this includes television and motion picture producers. We are also adopting our proposal to restrict the use of WAVDs from use at live events or for ENG operations. We clarify that WAVDs may be used to produce cable, satellite, and motion picture events for later showing on television (through free over the air TV, cable TV systems, and satellite TV systems) or in theaters, but may not be used in the production of live events. Similarly, we are adopting our proposal that WAVDs be excluded from operating under the short-term operation rule. This will ensure that WAVDs are properly coordinated and television stations, notified, to ensure that the potential of these devices to interfere with television broadcasts is minimized.

148. We are also adopting our proposal to require that WAVD stations be licensed prior to operating. Such licenses will be obtained through the ULS using FCC Form 601. In addition, consistent with our licensing of other low power auxiliary devices, WAVD licenses will normally be issued for a period of eight years and, for those held by a broadcast station, run concurrently with the license term of that station.³⁰⁸ For other license holders, the expiration date will be determined by the area of the country in which the station operates.³⁰⁹ These proposals were unopposed by commenters.

149. Finally, we address the request of AMPTP to allow third party contractors to obtain WAVD licenses. AMPTP states that third party contractors may wish to operate and/or rent WAVDs to studios. We are leery about expanding the eligibility of WAVDs beyond the entities already discussed. As stated in the *Notice*, the production industry and the broadcast industry rely on each other – one to produce content and the other to distribute content – and have a vested interest to operate in a manner that is mutually agreeable.³¹⁰ Therefore, we will not expand the eligibility for WAVD licenses to entities beyond those proposed. We stress that this does not preclude the operation of WAVDs by third party contractors. A party under contract to a television or motion picture producer may rent equipment and even operate it

³⁰⁵ *Id.* at 5.

³⁰⁶ SBE Comments at 21.

³⁰⁷ AMPTP Reply Comments at 5-6.

³⁰⁸ 37 C.F.R. § 74.15(b).

³⁰⁹ 47 C.F.R. § 73.1020.

³¹⁰ *Notice* at ¶ 93.

for the producer. However, such operation would be under the authority of the producer's license. This arrangement is consistent with rules in other services where entities are able to operate equipment under the authority of another entity's license.” Based on our experience, we believe that this arrangement best promotes accountability and compliance with our rules.

3. Authorized Frequencies

150. The *Notice* proposed to allow WAVDs to operate on unused television broadcast frequencies in the 180-210 MHz band (corresponding to VHF-TV channels 8-12) and the 470-608 MHz and 614-698 MHz bands (corresponding to UHF-TV channels 14-36 and 38-51). The *Notice* also proposed to define areas in which WAVD co-channel operation would be excluded in the 470-512 MHz band (TV channels 14-20) to protect land mobile operations in designated cities. Similarly, the *Notice* proposed to exclude WAVDs from operating within 52 km of the Gulf of Mexico in the 476-494 MHz band to protect the Offshore Radiotelephone Service (ORS) and PLMRS operations in the Gulf of Mexico. The *Notice* also proposed to exclude WAVDs from operating in the 608-614 MHz band (TV channel 37) to protect radio astronomy operations and within 52 km of Hawaii in the 488-494 MHz band to protect inter-island communications.”

151. No party specifically addressed the proposed frequencies, other than to express general support for using selected TV channels.³¹³ SBE, however, does reiterate comments it made in GN Docket No. 01-74 asking that guard band spectrum in the lower 700 MHz band can be used as a home for all low power auxiliary devices under Part 74, Subpart H.³¹⁴

152. *Discussion.* As an initial matter, we note that SBE's comments regarding the use of a guard band in the 700 MHz band for low power auxiliary devices is beyond the scope of this proceeding and will not be addressed herein. In light of the lack of comments on this issue, we adopt our proposals regarding authorized frequencies as proposed. Accordingly, WAVDs may operate on unused television broadcast frequencies in the 180-210 MHz, 470-608 MHz and 614-698 MHz bands. As proposed, we will not allow WAVDs to operate in the 174-180 MHz and 210-216 MHz bands (TV channels 7 and 13), in order to protect the Low Power Radio Service (LPRS), which supports auditory assistance devices and health care aids that operate pursuant to Part 95 and other low power devices operating under 90.265 of our rules.³¹⁵ In addition, this channel restriction will protect from interference the Navy's SPASUR radar system, which operates in the 216.88-217.08 MHz band.³¹⁶ We find that given the amount of spectrum

³¹¹ See, e.g., 47 C.F.R. § 90.421. This rule allows mobile stations to be installed in vehicles operated by persons other than the licensee. The licensee is responsible for taking any necessary precaution to effectively eliminate the possibility of unauthorized operation of transmitters when not under the control of the licensee. The rule specifically allows contractors to operate mobile units.

³¹² *Notice* at ¶¶ 96-99

³¹³ See, e.g., AMPTP Reply Comments at 3

³¹⁴ SBE Comments at 20.

³¹⁵ 47 C.F.R. § 90.265 and Part 95, Subpart G

³¹⁶ The SPASUR radar system is located in the southern United States and consists of three high power transmitters and six receiver locations. These operations are protected indefinitely for non-Government FS and mobile services by footnote US229. See 47 C.F.R. § 2.106 Note US229. Additionally, we note that pursuant to the Balanced Budget Act of 1997, the entire 216-220 MHz band was designated by NTIA for transfer to non-Government use and subject (continued ...)

we are authorizing for WAVDs, these restrictions will have minimal impact on their ability to identify spectrum on which to operate.

153. We adopt the proposal to exclude WAVDs from using land mobile radio channels” in the 470-512 MHz band (TV channels 14-20) in areas around the coordinates listed in Section 90.303 because nomadic WAVDs could not likely share spectrum with land mobile operations.³¹⁸ We also adopt the proposal to require WAVDs to maintain at least 6 megahertz frequency separation from such land mobile channels when operating within these areas. This frequency and geographic separation is necessary to protect public safety land mobile use, which in the 470-512 MHz private land mobile bands could occur on any of the channels allocated in a given area.” Therefore, all TV channels listed in Section 90.303 are excluded from WAVD use at the locations listed.” As discussed in the *Notice*, the band 482-488 MHz (TV channel 16) will also be excluded from WAVD use in the New York City area to protect New York City public safety entities which are using that spectrum under a waiver.” Similarly, the band 476-494 MHz (TV channels 15-17) will be excluded from WAVD in areas near the Gulf of Mexico to protect the PLMRS” and communication links in the ORS under Part 22 of our rules.³²³ Communications with mobile stations under these rules are generally limited to stations within the Gulf (e.g., stations on boats or aircraft) or to stations on the shore. Finally, WAVDs will be excluded from the band 488-494 MHz (TV channel 17) in areas near Hawaii to protect common carrier control and repeater stations for point-to-point inter-island communications.”

154. The frequencies on which we will exclude WAVD use are summarized in the table below. We reiterate that these exclusions will not prevent WAVDs from operating on channels listed in the table when WAVDs are a sufficient distance from the cities listed below.

(Continued from previous page)

to licensing by competitive bidding. See Pub. L. 105-33, 111 Stat. 251 (1997). The use of the 216-220 MHz band is being examined in ET Docket No. 00-221. See In the Matter of Reallocation of the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands, ET Docket No. 00-221, *Notice of Proposed Rule Making*, rel. Nov. 20, 2000.

³¹⁷ 47 C.F.R. Part 90, Subpart L. See also, 47 C.F.R. §§ 22.591, 22.621, 22.651, and 22.1007.

³¹⁸ We address the separation requirements below

³¹⁹ All channel assignments in the 470-512 MHz band are made out of a general access pool. See 47 C.F.R. § 90.303.

³²⁰ 47 C.F.R. § 90.303

³²¹ See In the Matter of Waiver of Parts 2 and 90 of the Commission's Rules to Permit New York Metropolitan Area Public Safety Agencies to Use Frequencies at 482-488 MHz on a Conditional Basis, *Order*, 10 FCC Rcd 4466 (1995).

³²² 47 C.F.R. § 90.315

³²³ 47 C.F.R. Part 22, Subpart I

³²⁴ 47 C.F.R. §§ 2.106, footnotes NG127 and 22.603

Area	Excluded Frequencies (MHz)	Excluded Channels
Boston, MA.....	470-494	14-17
Chicago, IL	470-488	14-16
Cleveland, OH (WAVDs may operate until further order from the Commission)	470-494	14-17
Dallas/Fort Worth, TX	476-494	15-17
Detroit, MI (WAVDs may operate until further order from the Commission)	470-494	14-17
Hawaii.....	488-494	17
Houston, TX	482-500	16-18
Los Angeles, CA	470-494 & 500-518	14-17 & 19-21
Miami, FL	470-482	14-15
New York/ N.E. New Jersey.....	470-494	14-17
Philadelphia, PA	494-518	18-21
Pittsburgh, PA.....	470-482 & 488-506	14-15 & 17-19
San Francisco/Oakland, CA	476-500	15-18
Washington D.C./MD/VA	482-506	16-19

155. Finally, as proposed in the *Notice*, we will exclude WAVDs from operating in the 608-614 MHz band (TV channel 37) to protect radio astronomy operations in that band. This exclusion is consistent with the Table of Allocations in Part 2 of our rules, which specifies that no stations will be authorized to transmit in that band.³²⁵ We also note we have recently authorized the use of medical telemetry in the 608-614 MHz band³²⁶ and this exclusion will also protect those operations. Finally, WAVDs will not be allowed to use channels above 698 MHz (channel 51) in the UHF-TV band due to a recent spectrum reallocation of those channels to uses other than broadcasting. We find that these exclusions are justified to protect existing operations in these bands.

4. Technical and Operational Requirements

156. The *Notice* proposed conservative technical and operational requirements to allow WAVDs to operate without harming other operations. Specifically, the *Notice* proposed: (1) to limit the CRP of WAVDs to 250 milliwatts (mW); (2) to require that the transmitting devices use a permanently attached antenna; (3) to allow WAVDs bandwidths of up to 6 megahertz, limited to transmitting on a single TV channel (*i.e.*, WAVD transmissions may not overlap the TV channel edge); (4) to use the same emission limitations being proposed for other TV BAS transmitters in this proceeding; (5) to authorize WAVD transmitters under the certification procedures of Part 2 of our rules; (6) to require WAVDs to maintain a 129 km separation distance from TV broadcasting stations operating on the same frequency and a 200 km separation distance from cities where land mobile operations are authorized;³²⁷ (7) to

³²⁵ 47 C.F.R. § 2.106, Note US246.

³²⁶ See Amendment of Parts 2 and 95 of the Commission's Rules to Create a Wireless Medical Telemetry Service. ET Docket No. 99-255, *Report and Order*, 15 FCC Rcd 11206 (2000).

³²⁷ In addition, we proposed that WAVDs maintain a 52 km separation from the Gulf of Mexico in the 476-494 MHz band and from Hawaii in the 488-494 MHz band. See Notice at ¶ 105.

require WAVD operators to achieve prior notification, rather than coordination, with the local broadcast coordinator or any adjacent channel TV station within 161 km of each intended WAVD operation at least 10 business days in advance of operation;³²⁸ (8) that WAVD licensees be subject to the station identification requirements of Section 74.882; and (9) that manufacturers include certain information in the product literature that is included with WAVDs to indicate the requirements for using these devices.³²⁹

157. AMPTP endorses all of the proposed technical and operational requirements proposed with the exception of the requirement that WAVDs use a permanently attached antenna. They contend that such antennas are fragile and suffer frequent damage. AMPTP therefore recommends that WAVD antennas be removable to facilitate repair and maintenance, as is the case with land mobile radios.” SBE disagrees with AMPTP and maintains that permanently attached antennas can be manufactured sufficiently robust to withstand day-to-day use. SBE asserts that this requirement is an important safeguard against uninformed parties using external, high gain antennas to illegally boost the WAVD EIRP.³³¹ AMPTP argues that potential problems from detachable antenna usage should be addressed and solved through the notification and response procedures with the frequency coordinator.³³²

158. MSTV/NAB requests that WAVDs be required to conduct full frequency coordination through the local frequency coordinator, rather than a notification 10 days in advance of operation. They also oppose the proposal to allow a non-response from a local frequency coordinator to be considered approval for WAVD operations because they contend that a WAVD operator could simply leave a message with a coordinator and go forward with operations without any knowledge of the impact those operations would cause to low power BAS operations.³³³ AMPTP opposes full frequency coordination. AMPTP argues that because WAVDs will operate with low EIRP over a limited range on a non-interference basis, 10 days is ample time to address any concerns that existing operators may have. Further, AMPTP states that the provision allowing WAVDs to operate in the absence of a coordinator response protects their use if a coordinator misplaces or accidentally discards a response. Also, they state that the operating efficiency of producers must be considered as well as potential interference.³³⁴

159. *Discussion.* The various technical and operational requirement proposals for WAVDs set forth in the *Notice* were designed to protect other users of the TV bands without unnecessarily hindering WAVD operations. Most of these were unopposed, and we will adopt them as proposed. Specifically, we adopt the ERP limit of 250 mW, the bandwidth limit of 6 megahertz on a single TV

³²⁸ We proposed that such notifications include: the proposed frequency or frequencies, location, maximum antenna height, type of emission, effective radiated power, intended dates of operation, and licensee contact information. In addition, we stated that the coordinator's recommendation regarding the operation of a particular WAVD must be followed by the WAVD licensee. Licensees could appeal to the Commission if they disagree with a coordinator's recommendation, but would bear the burden of proof in overturning the recommendation.

³²⁹ *Notice* at ¶¶ 100-109.

³³⁰ *Id.* at 5-6.

³³¹ SBE Comments at 21.

³³² AMPTP Reply Comments at 5.

³³³ MSTV/NAB Comments at 1.

³³⁴ AMPTP Reply Comments at 4-5.

channel, the requirement to meet the same emissions limitations as other Part 74 transmitters, Part 2 certification procedures for WAVD transmitters,” the proposed separation distances from TV and land mobile stations.”” the requirement that WAVD licensees follow the station identification requirements of Section 74.882: and the requirement that manufacturers include certain information in their product literature.

160. With respect to the antenna issue raised by commenters, we agree with SBE that the use of unintended antennas should be avoided because they could increase the interference potential. We also agree with AMPTP that a permanently attached antenna may result in increased repair costs. We believe that a reasonable compromise between these positions exists. We note that our Part 15 rules contain a provision allowing either permanently attached antennas or devices with unique couplings to permit antennas to be more easily repaired.” This has worked well in the preventing unintended antennas from being attached to low power unlicensed devices and we believe a similar requirement would work here. Accordingly, we are adopting a requirement that WAVDs contain a permanently attached antenna or contain a unique connector that allows for easy antenna repair while preventing the use of unauthorized antennas.

161. After considering the comments of MSTV/NAB, we continue to believe that notification is more appropriate than full coordination for WAVDs. We take this position based on the low ERP, limited range, and non-interference status of WAVDs. In addition, because WAVDs may be used at multiple locations in support of a production, notification will be less burdensome than coordination for both the WAVD licensee and the coordinator while still providing adequate protection to broadcast transmissions. In this connection, will adopt our proposal to consider the absence of a response from a coordinator after ten business days have passed as an approval. Once the WAVD operator has made reasonable attempts to notify the BAS coordinator or appropriate TV stations, we find that failure of these entities to respond to the WAVD operator approval is an insufficient basis to delay use of WAVDs. We find that this approach strikes a reasonable balance between the requirements of producers and the needs of the coordinator to study notifications and respond to operators as necessary. In response to MSTV/NAB’s concerns, however, we will require WAVD licensees to notify, for informational purposes only, nearby co-channel and adjacent channel TV stations (*i.e.*, those stations within 161 km of the WAVD location).³³⁵ As stated, this will be informational only and television stations will not be able to prevent a WAVD from operating. However, this informational notification may help identify the source of interference if any is experienced after a WAVD begins operating. We adopt all other aspects of the notification proposal as proposed.

³³⁵ We note that no commenter responded to our question regarding whether the declaration of conformity procedures would be more appropriate for WAVDs than the certification procedures.

³³⁶ We will condition licenses to require licensees to comply with the frequency and distance limitations set forth in new Section 74.870(c), and with the notification procedures set forth in new Section 74.870(g), for each operation. In addition, we note that, given the low 250 mW ERP and secondary status of WAVD operations, international frequency coordination is not required for operations close to Canadian or Mexican borders. However, such operations are secondary to primary Canadian or Mexican systems as they are to primary domestic systems, and they must not cause harmful interference to, and must accept interference from, primary Canadian and Mexican systems.

³³⁷ See 47 C.F.R. §15.203

³³⁸ Under the rules adopted herein, WAVDs must be separated from co-channel TV operations by at least 129 km

IV. CONCLUSION

162. In making the rule amendments adopted herein, we are updating the Broadcast Auxiliary Service rules in Part 74 and permitting increased compatibility between Broadcast Auxiliary Services, the Cable Television Relay Service, and Fixed Service Microwave systems operating on shared spectrum. Moreover, licensees and equipment manufacturers will gain greater technical flexibility and more efficiency in the licensing process **by** these changes and the broadcast industry will find it easier to transition to digital TV. Additionally, we are permitting wireless assist video devices to operate on certain VHF and UHF TV spectrum, thereby increasing spectrum efficiency and promoting equipment which will increase safety at production sites as well as lower film and television production costs.

V. PROCEDURAL MATTERS

163. Final Regulatory Flexibility Analysis. The Final Regulatory Flexibility Analysis, required by Section 603 of the Regulatory Flexibility Act, as amended by the Contract with America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996), is contained in Appendix B.

164. Paperwork Reduction Act Analysis. This Report and Order contains modified information collection(s) subject to the PRA of 1995, Public Law 104-13.

VI. ORDERING CLAUSES

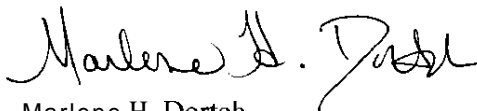
165. Accordingly, **IT IS ORDERED** that, pursuant to Sections 1, 4(i), 302, 303(f) and (r), 332, and 337 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 1, 4(i), 154(i), 302, 303(f) and (r), 332, 337, this *Report and Order* and the rules specified in Appendix A **ARE ADOPTED**.

166. **IT IS FURTHER ORDERED** that the rules specified in Appendix A, except for those specified below, will become effective 30 days after their publication in the Federal Register.

167. **IT IS FURTHER ORDERED** that, pursuant to Pursuant to 5 U.S.C. §§ 553(d)(1) and 553(d)(3), the rules implementing digital modulation of BAS stations specified in Appendix A, specifically Sections 74.535 and 74.637 of the Commission's Rules, 47 C.F.R. §§ 74.535 and 74.637, will become effective as of the adoption date of this *Report and Order*.

168. **IT IS FURTHER ORDERED** that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, **SHALL SEND** a copy of this *Report and Order*, ET Docket No. 01-75, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION



Marlene H. Dortch
Secretary